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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/708,529	03/10/2004	Jim Bumgardner	UV-449	2528

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EXAMINER

MARANDI, JAMES R

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4157

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/708,529	Applicant(s) BUMGARDNER ET AL.	
	Examiner James R. Marandi	Art Unit 4157	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>11/3/2004</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Rejections - 35 USC § 101

1. A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and useful process ... may obtain a patent therefor ..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer cannot overcome a double patenting rejection based upon 35 U.S.C. 101.

2. Claims 26 and 27 are provisionally rejected under 35 U.S.C. 101 as claiming the same invention as that of claims 1, and 2 of copending Application No.

10/708,529.

To effectively share resources, on a network, there must be a semblance of order and priorities. Once the set-top boxes are networked, all resources, local or remote, become available according to the priority rules. As such the concept of foreground/ background tuning is mute and redundant and is covered by the limitations of claims 1 and 2.

Applicant is reminded of Applicants duty to disclose **copending applications, per MPEP 2001.06 (b):**

Applicants must bring to the attention of the examiner, or other Office official involved with the examination of a particular application, information within their knowledge as to other copending United States applications which are "material to patentability" of the application in question.

We have come across the copending application no. 10/605,246 , "Tuner Sharing Video Recorder System Architecture", which has not been disclosed, as prescribed, in the course of application no. 10/708,529 which is the purview of this office action.

It is well known in the art, as is indicated in the application 10/708,529 (paragraph 0028): "A set-top box is a device that is connected to or incorporated within an output device, such as a television set or computer monitor. The set-top box typically has the functionality of a computing device, including a processor that is controlled by software or firmware and a storage device that includes any or all of a combination of hard drives, random access memory (RAM), read only memory (ROM), flash memory, caches, and buffers.". The concept, methods, apparatus, means, and systems for sharing resources amongst computing devices are well known and documented in the art. For reference, please refer to Metcalfe et al., US Patent 4,063,220 ,and Kindell et al., US Patent 5,630,067.

As such, the video recorder (and its components), and the set-top box (and its components) could be one and the same, as illustrated by the applicant in figure 1 of application 10/708,529 , and figure 1 of the copending application 10/605,246. Therefore, Claims 1 through 25 are provisionally rejected under 35 U.S.C. 101 as claiming the same invention as that of claims 1 through 33 of copending Application No. 10/605,246 even though the wording of the claims may not be exactly the same.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in–

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent; or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for the purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English.

4. Claims 1 through 8 are rejected under 35 U.S.C. 102(a) as being anticipated by Cheng et al, European Patent Application EP1355496 (hereinafter “Cheng”).

Cheng states "A set top box is an exemplary computing environment that is able to receive, send and process content. Exemplary set top boxes include, but are not limited to, digital video recorders (DVRs), satellite receivers, Internet terminals, cable boxes, digital satellite systems (DSS), a computer, and the like and any combination thereof"[0030]. Components (tuners, storage, CPU, etc.) can be centralized or distributed throughout the network ([0008], Figs 1 and 2).

Regarding claims 1 through 8, Cheng discloses substantially as claimed: A method for using a network of set-top boxes, comprising: connecting at least a first (element 114) and a second set-top box (element 116) in a network (element 110); making one or more resources in each of said first and second set-top boxes available to said network (element 121) receiving a command in said first set-top box which requires some or all of said resources; and using said resources in said first or said second set-top box (Figures 1,2). Said resources include tuners or storage devices (claim 2). As part of the distributed network [0025], it is well known within the art, that all resources are available to clients and/or servers. Availability of resources, such as tuners, are managed and any conflicts resolved by a resource arbiter ([0009], [0012], elements 122,124,126, 142,144, and 146), therefore meeting limitations of claims 3 and 4. Cheng further teaches and demonstrates scheduling (claim 5), recording (claim 6), availability of time slots (claim 7), and resources (claim 8). (Paragraphs [0032], and [0038]).

Claims 9 through 15 are further rejected by the same analysis as claims 1 through 8.

Claims 16 is rejected by the same analysis as claim 1.

Claim 17 through 24 are further rejected by the same analysis as claims 1 through 8.

Claim 25 is further rejected by the same analysis as claim 1.

Claims 26 and 27 are rejected, as Cheng demonstrates tuner priority setting/ allocation [0014], therefore, making possible a foreground tuner and a background tuner, wherein said priority rule comprises a background tuner taking precedence over a foreground tuner.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- T. Okano et al., "Load Balancing System", US Patent No. 6,725,253.
Okano presents a load balancing apparatus which balances the load of servers in a client/ server system.
- Hopper et al. "Distributed Interactive Multimedia Service System", US Patent 5,671,225. A distributed computing environment providing multimedia services.
- Veltman et al., "Establishing Connections Between Remote Devices with a Hypertext Transfer Protocol", US Patent Application Publication 2002/0152311. Establishing connections between remotely controllable devices such as tuners and storage media.

- Humpleman Richard, "Home Multimedia Network Architecture", US Patent 5,940,387. A multimedia network (including set-top boxes) sharing networked resources.
- Hokanson T.E., "System and Method for Managing Distributed Resources on Networks", US Patent 6,094,680.
- Bucher Tim, "Home Network Appliance and Method", US Patent 6,678,737. An appliance enabling various network modules share networked resources (tuners, memory, etc.)
- Adelnur A. et al., "Resource Sharing on the Internet via the HTTP", US Patent 6,789,204. A method an apparatus for sharing resources (CPU, memory, etc.) in a networked environment.
- Monaco F.J. et al., "Remote Device Command Resource Sharing over the Internet", IEEE Transaction on Computers, July 2002. Presenting the concept of Cooperating Network Devices (CNDs) sharing resources and services in a networked environment.
- Gong Li, "A Software Architecture for Open Service Gateways", IEEE Internet Computing, Jan-Feb 2001. Gong shows how the familiar TV set-top box can be transformed into a residential gateway of networking and information services.
- Jeager Rudolf, "Set-Top Box Software Architecture for Digital Video Broadcast and Interactive Services", IEEE, 2001.

- Bill Wittress et al, "Internet Protocol (IP) Set-Top Boxes", Microsoft, September 2003. This document shows how TV set-top boxes are delivering interactive services (same as any other computing device!).
- Hofrichter Klaus, "The residential Gateway as Service Platform", IEEE Consumer Electronics, 2001. A resource manager, networked, ensures that resources such as devices or storage space are available with the appropriate quality of service attributes when required by services.
- Rusnak Joseph G., "Anywhere in the Home", IEEE Fourth International Workshop on Community Networking, Sep. 1997. IBM's vision of networked home and entertainment devices.

Contact Info

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James R. Marandi whose telephone number is (571) 270-1843. The examiner can normally be reached on 8:00 AM- 5:00 PM M-F, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vu Le can be reached on (571) 272-7332. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2600

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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/Vu Le/
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